



Attorney Docket No. 100405-02274

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : Wohlstadter et al.  
Application No. : 10/693,441  
Filed : October 24, 2003  
For : **MULTI-ARRAY, MULTI-SPECIFIC  
ELECTROCHEMILUMINESCENCE TESTING**  
Group Art Unit : Unassigned  
Examiner : Unassigned

Commissioner for Patents  
P.O. Box 1450  
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Mary W. Richardson  
Mary W. Richardson, Registration No. 48,320  
Kramer Levin Nafatlis & Frankel LLP

## **TRANSMITTAL LETTER**

Sir:

Transmitted herewith is:

- Information Disclosure Statement
- Information Disclosure Statement By Applicant (PTO/SB/08a and PTO/SB/08b)
- Copy of each of the Foreign Patent Documents cited on Form PTO/SB/08a.
- Copy of each of the Non-Patent Literature Documents cited on Form PTO/SB/08b.
- No fee is believed to be due for filing the Information Disclosure Statement and Forms PTO/SB/08a and PTO/SB/08b. But, if any fees are due, please charge them to Deposit Account No. 50-0540. A duplicate copy of this sheet is enclosed.
- Acknowledgement postcard.

Customer No. 35745

Attorney Docket No. 100405-02274

[X] Address all future communications to: **CUSTOMER NO. 35745**.

Dated: December 18, 2003

Respectfully submitted,

KRAMER LEVIN NAFTALIS & FRANKEL LLP  
919 Third Avenue  
New York, N.Y. 10022-3852  
Tel. No.: (212) 715-9100  
Fax. No.: (212) 715-8000  
Attorneys for Applicants

By: Mary W. Richardson  
Barry Evans, Reg. No. 22,802  
Mary W. Richardson, Reg. No. 48,320

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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re Application of : Wohlstadter et al.  
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Signature: Mary W. Richardson  
Mary W. Richardson, Reg. No. 48,320  
Kramer, Levin, Naftalis & Frankel LLP

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Applicants respectfully submit this Information Disclosure Statement pursuant to 37 C.F.R. §§ 1.97 and 1.98 in order to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56. These references are listed herein and on the PTO Form No. PTO/SB/08a & PTO/SB/08b submitted herewith. It is respectfully requested that the information be expressly considered during the prosecution of this application and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

**I. U.S. PATENTS**

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2. Jolley, U.S. Patent No. 4,652,533, issued March 24, 1987.

3. Tennent, U.S. Patent No. 4,663,230, issued May 5, 1987.
4. Guire, et al., U.S. Patent No. 4,826,759, issued May 2, 1989.
5. Hubscher, U.S. Patent No. 4,891,321, issued January 2, 1990.
6. Zoski, et al., U.S. Patent No. 5,061,445, issued October 29, 1991.
7. Hall, et al., U.S. Patent No. 5,068,088, issued November 26, 1991.
8. Leventis, et al., U.S. Patent No. 5,093,268, issued March 3, 1992.
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10. Friend, et al., U.S. Patent No. 5,110,693, issued May 5, 1992.
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13. Tennent, et al., U.S. Patent No. 5,165,909, issued November 24, 1992.
14. Tennent, U.S. Patent No. 5,171,560, issued December 15, 1992.
15. Leventis, et al., U.S. Patent No. 5,189,549, issued February 23, 1993.
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2. Bening, R.C., *et al.*, PCT International Publication No. WO 90/14221, published November 29, 1990.
3. Leland, J.K., *et al.*, PCT International Publication No. WO 92/14139, published August 20, 1992.
4. Bard, A.J., *et al.*, PCT International Publication No. WO 96/06946, published March 7, 1996.
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REMARKS

A copy of each of the Foreign Patent Documents cited on Form PTO/SB/08a and each of the Non-Patent Literature Documents cited on Form PTO/SB/08b is provided herewith, along with the Forms PTO/SB/08a and PTO/SB/08b, which are provided in duplicate.

This Information Disclosure Statement is not a representation that the documents cited herein are considered most pertinent, or that a search has been undertaken, or that any of the cited documents is indeed prior art. The Examiner is invited to undertake an independent search.

Pursuant to Rule 37 C.F.R. § 1.97(b), an Information Disclosure Statement shall be considered by the Patent Office if filed before the mailing date of the first Official Action on the merits. Accordingly, no fee is believed necessary for entry and consideration of this Information Disclosure Statement. However, the Commissioner is hereby authorized to charge any fee required or credit any overpayment in such fees to Deposit Account No. **50-0540**.

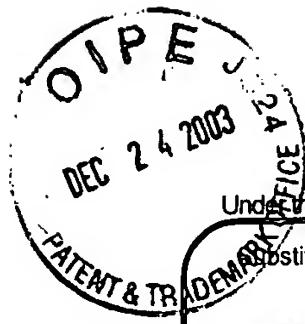
Applicants respectfully request that a copy of Forms PTO/SB/08a and PTO/SB/08b, appropriately initialed by the Examiner, be returned to Applicants' attorney.

Dated: December 18, 2003

Respectfully submitted,

KRAMER LEVIN NAFTALIS & FRANKEL LLP  
919 Third Avenue  
New York, New York 10022  
Tel. (212) 715-9100  
Fax. (212) 715-8000  
Attorneys for the Applicants

By: Mary W. Richardson  
Barry Evans, Reg. No. 22,802  
Mary W. Richardson, Reg. No. 48,320



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				<i>Complete if Known</i>	
Sheet	1	of	2	Application Number	Unassigned
				Filing Date	October 24, 2003
				First Named Inventor	Wohlstadter et al.
				Art Unit	Unassigned
				Examiner Name	Unassigned
				Attorney Docket Number	100405-02274

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US-4,280,815	07-28-1981	Oberhardt, et al.	
	AB	US-4,652,533	03-24-1987	Jolley	
	AC	US-4,663,230	05-05-1987	Tennent	
	AD	US-4,826,759	05-02-1989	Guire, et al.	
	AE	US-4,891,321	01-02-1990	Hubscher	
	AF	US-5,061,445	10-29-1991	Zoski, et al.	
	AG	US-5,068,088	11-26-1991	Hall, et al.	
	AH	US-5,093,268	03-03-1992	Leventis, et al.	
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	AL	US-5,147,806	09-15-1992	Kamin, et al.	
	AM	US-5,165,909	11-24-1992	Tennent, et al.	
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	AR	US-5,238,808	08-24-1993	Bard, et al.	
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	AT	US-5,247,243	09-21-1993	Hall, et al.	
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	AZ	US-5,340,716	08-23-1994	Ullman, et al.	
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	ABB	US-5,466,416	11-14-1995	Ghaed, et al.	
	ACC	US-5,468,606	11-21-1995	Bogart, et al.	
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	AEE	US-5,527,710	06-18-1996	Nacamulli, et al.	
	AFF	US-5,591,581	01-07-1997	Massey, et al.	
	AGG	US-5,632,957	05-27-1997	Heller, et al.	
	AHH	US-5,776,672	07-07-1998	Hashimoto, et al.	
	AII	US-6,413,783	07-02-2002	Wohlstadter, et al.	

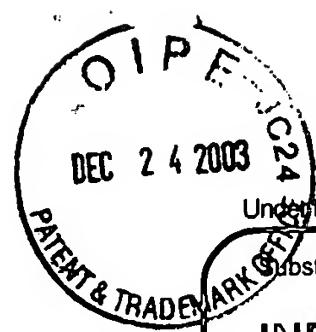
FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)			
	BA	PCT	WO 90/05301	05-17-1990	Shah, H.P., et al.
	BB	PCT	WO 90/14221	11-29-1990	Bening, R.C., et al.
	BC	PCT	WO 92/14139	08-20-1992	Leland, J.K., et al.
	BD	PCT	WO 96/06946	03-07-1996	Bard, A.J., et al.
	BE	PCT	WO 96/39534	12-12-1992	Martin, M.
	BF	EP	0 478 319 A1	04-01-1992	Hashimoto, K., et al.
	BG	EP	0 522 677 A1	01-13-1003	Shibue, A., et al.

Examiner Signature	Date Considered
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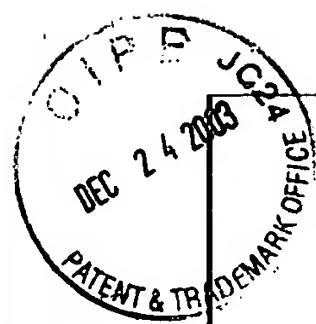
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Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	Unassigned
				Filing Date	October 24, 2003
				First Named Inventor	Wohlstadter et al.
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	1	of	5	Attorney Docket Number	100405-02274

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
	CA	Abbott, N.L. and Whitesides, G.M., "Potential-Dependent Wetting of Aqueous Solutions on Self-Assembled Monolayers Formed from 15-(Ferrocenylcarbonyl) pentadecanethiol on Gold," <i>Langmuir</i> 10(5): 1493-1497 (1994).			
	CB	Abbott, N.L., <i>et al.</i> , "Manipulation of the Wettability of Surfaces on the 0.1 - to 1- Micrometer Scale Through Micromatching and Molecular Self-Assembly," <i>Science</i> 257: 1380-1382 (1992).			
	CC	Abbott, N.L., <i>et al.</i> , "Using Micromachining, Molecular Self-Assembly, and Wet Etching to Fabricate 0.1-1 $\mu$ m-Scale Structures of Gold and Silicon," <i>Chem. Mater.</i> 6(5): 596-602 (1994).			
	CD	Adalsteinsson, O., <i>et al.</i> , "Preparation and Magnetic Filtration of Polyacrylamide Gels Containing Covalently Immobilized Proteins and a Ferrofluid," <i>J. Mol. Catal.</i> 6(3): 199-225 (1979).			
	CE	Bain, C.D. and Whitesides, G.M., "Modeling Organic Surfaces with Self-Assembled Monolayers," <i>Angew. Chem.</i> 101(4): 522-528 (1989).			
	CF	Bains, W., "Setting a Sequence to Sequence a Sequence," <i>Bio/Technology</i> 10: 757-758 (1992).			
	CG	Chaudhury, M.K. and Whitesides, G.M., "Correlation Between Surface Free Energy and Surface Constitution," <i>Science</i> 255: 1230-1232 (1992).			
	CH	Chaudhury, M.K. and Whitesides, G.M., "How To Make Water Run Uphill," <i>Science</i> 256: 1539-1541 (1992).			
	CI	Deaver, D.R., "A New Non-Isotopic Detection System for Immunoassays," <i>Nature</i> 377: 758-760 (1995).			



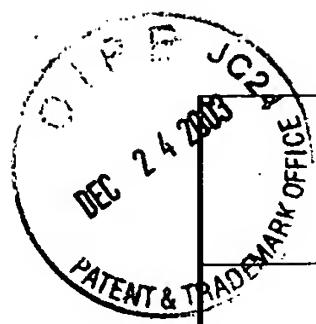
	CJ	DiMilla, P.A., <i>et al.</i> , "Wetting and Protein Adsorption of Self-Assembled Monolayers of Alkanethiolates Supported on Transparent Films of Gold," <i>J. Am. Chem. Soc.</i> 116(5): 2225-2226 (1994).	
	CK	Dresselhaus, M.S., Dresselhaus, G., and Eklund, P.C., <u>Science Of Fullerenes And Carbon Nanotubes</u> , Academic Press, San Diego, CA (1996).	
	CL	Ferguson, G.S., <i>et al.</i> , "Monolayers on Disordered Substrates: Self-Assembly of Alkyltrichlorosilanes on Surface-Modified Polyethylene and Poly(dimethylsiloxane)," <i>Macromolecules</i> 26: 5870-5875 (1993).	
	CM	Ferguson, G.S., <i>et al.</i> , "Contact Adhesion of Thin Gold Films on Elastomeric Supports: Cold Welding Under Ambient Conditions," <i>Science</i> 253: 776-778 (1991).	
	CN	Gershon, P.D. and Khilko, S., "Stable Chelating Linkage for Reversible Immobilization of Oligohistidine Tagged Proteins in the BIACore Surface Plasmon Resonance Detector," <i>J. Immunol. Methods</i> 183: 65-76 (1995).	
	CO	Haapakka, K.E., "The Mechanism of the Cobalt(II)-Catalyzed Electrogenerated Chemiluminescence of Luminol in Aqueous Alkaline Solution," <i>Anal. Chim. Acta</i> 141: 263-268 (1982).	
	CP	Hickman, J.J., <i>et al.</i> , "Molecular Self-Assembly of Two-Terminal Voltametric Microsensors with Internal References," <i>Science</i> 252: 688-691 (1991).	
	CQ	<u>Hydrogels In Medicine And Pharmacy</u> , Vols. I-III. Peppas, N.A., Ed.. CRC Press: Boca Raton, Florida (1987).	
	CR	Itaya, K. and Bard, A.J., "Chemically Modified Polymer Electrodes: Synthetic Approach Employing Poly(methacryl chloride) Anchors," <i>Anal. Chem.</i> 50(11): 1487-1489 (1978).	
	CS	Kaneko, E., <u>Liquid Crystal TV Displays: Principles And Applicants Of Liquid Crystal Displays (Advances in Optoelectronics, No. 2)</u> . KTK Scientific Publishers, Tokyo; D. Reidel Publishing Co., Dordrecht. Chapter 2: 3-32 (1987).	
	CT	Kim, E., <i>et al.</i> , "Polymer Microstructures Formed by Moulding in Capillaries," <i>Nature</i> 376: 581-584 (1995).	
	CU	Knight, A.W. and Greenway, G.M., "Occurrence, Mechanisms and Analytical Applications of Electrogenerated Chemiluminescence," <i>Analyst</i> 119: 879-890 (1994).	



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	CW	Kumar, A., <i>et al.</i> , "Patterning Self-Assembled Monolayers: Applications in Materials Science," <i>Langmuir</i> 10: 1498-1511 (1994).	
	CX	Laibinis, P.E., <i>et al.</i> , "Orthogonal Self-Assembled Monolayers: Alkanethiols on Gold And Alkane Carboxylic Acids on Alumina," <i>Science</i> 245: 845-847 (1989).	
	CY	Leland, J.K. and Powell, M.J., "Electrogenerated Chemiluminescence: An Oxidative-Reduction Type ECL Reaction Sequence Using Tripropyl Amine," <i>J. Electrochem. Soc.</i> 137: 3127-3131 (1990).	
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	CBB	<u>Methods in Enzymology. Volume 135. Immobilized Enzymes And Cells. Pt. B.</u> Mosbach, K., Ed. Academic Press: Orlando, Florida; Elsevier Applied Science: London (1987).	
	CCC	<u>Methods in Enzymology. Volume 136. Immobilized Enzymes And Cells. Pt. C.</u> Mosbach, K., Ed. Academic Press: Orlando, Florida; Elsevier Applied Science: London (1987).	
	CDD	Nielsen, P.E., "DNA Analogues with Nonphosphodiester Backbones," <i>Ann. Rev. Biophys. Biomol. Struct.</i> 24: 167-183 (1995).	
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	CFF	Olah, G.A., <i>et al.</i> , "Polymer Films on Electrodes. 4. Nafion-Coated Electrodes and Electrogenerated Chemiluminescence of Surface-Attached Ru(bpy) <sub>3</sub> <sup>2+</sup> ," <i>J. Am. Chem. Soc.</i> 102: 6641-6642 (1980).	
	CGG	Pale-Grosdemange, C., <i>et al.</i> , "Formation of Self-Assembled Monolayers by Chemisorption of Derivatives of Oligo (ethylene glycol) of Structure HS(CH <sub>2</sub> ) <sub>11</sub> (OCH <sub>2</sub> CH <sub>2</sub> ) <sub>m</sub> OH on Gold," <i>J. Am. Chem. Soc.</i> 113(1): 12-20 (1991).	



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	CII	<u>Poly(ethylene Glycol) Chemistry: Biotechnical and Biomedical Applications</u> , Harris, J.M., Ed. Plenum Press: New York (1992).	
	CJJ	<u>Polymer Applications For Biotechnology: Macromolecular Separation And Identification</u> . Soane, D.S., Ed. Prentice Hall: Englewood Cliffs, N.J. (1992).	
	CKK	Prime, K.L., and Whitesides, G.M., "Adsorption of Proteins onto Surfaces Containing End-Attached Oligo (ethylene oxide): A Model System Using Self-Assembled Monolayers," <i>J. Am. Chem. Soc.</i> 115(23): 10714-10721 (1993).	
	CLL	Prime, K.L. and Whitesides, G.M., "Self-Assembled Organic Monolayers: Model Systems for Studying Adsorption of Proteins at Surfaces," <i>Science</i> 252: 1164-1167 (1991).	
	CMM	Rubinstein, I. and Bard, A.J., Polymer Films on Electrodes. 4. Nafion-Coated Electrodes and Electrogenerated Chemiluminescence of Surface-Attached $\text{Ru}(\text{bpy})_3^{2+}$ ," <i>J. Am. Chem. Soc.</i> 102: 6641-6642 (1980).	
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	COO	Sassenfeld, H.M., "Engineering Proteins for Purification," <i>TIBTECH</i> 8: 88-93 (1990).	
	CPP	<u>Solid Phase Biochemistry: Analytical And Synthetic Aspects</u> . Scouten, W.H., Ed. J. Wiley & Sons, NY (1993).	
	CQQ	Spinke, J., <i>et al.</i> , "Molecular Recognition at Self-Assembled Monolayers: Optimization of Surface Functionalization," <i>J. Chem. Phys.</i> 99(9): 7012-7019 (1993).	
	CRR	Spinke, J., <i>et al.</i> , "Molecular Recognition at Self-Assembled Monolayers: The Construction of Multicomponent Multilayers," <i>Langmuir</i> 9(7): 1821-1825 (1993).	
	CSS	Strezoska, Z., <i>et al.</i> , "DNA Sequencing by Hybridization: 100 Bases Read by a Non-Gel-Based Method," <i>Proc. Natl. Acad. Sci. USA</i> 88: 10089-10093 (1991).	
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	CUU	Tampion, J. and Tampion, M.D., <u>Immobilized Cells: Principles And Applications</u> . Cambridge Univ. Press, Cambridge, U.K. (1987).	



CWW	Wilbur, J.L., <i>et al.</i> , "Scanning Force Microscopies Can Image Patterned Self-Assembled Monolayers," <i>Langmuir</i> 11(3): 825-831 (1995).
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CXX	Xu, X.-H. and Bard, A.J., "Electrogenerated Chemiluminescence. 55. Emission from Adsorbed Ru(bpy) <sub>3</sub> <sup>2+</sup> on Graphite, Platinum, and Gold," <i>Langmuir</i> 10(7): 2409-2414 (1994).
CYY	Xu, X.-H., <i>et al.</i> , "Immobilization of DNA on an Aluminum (III) Alkanebisphosphonate Thin Film with Electrogenerated Chemiluminescent Detection," <i>J. Am. Chem. Soc.</i> 116(18): 8386-8387 (1994).
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